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ATTORNEY DOCKET NO. CONFIRMATION NO.

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 09/851,757 05/08/2001 Rajeev Sethia VLSI-3512 3873 24738 7590 11/30/2005 **EXAMINER** PHILIPS ELECTRONICS NORTH AMERICA CORPORATION LIPMAN, JACOB INTELLECTUAL PROPERTY & STANDARDS PAPER NUMBER 1109 MCKAY DRIVE, M/S-41SJ ART UNIT SAN JOSE, CA 95131 2134

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED OIPE/IAP DEC 13 2005

		Application	on No.	Applicant(s)	1	
Office Action Summary		09/851,75		SETHIA ET AL.		
		Examiner		Art Unit		
		Jacob Lip	man	2134		
Period fo	The MAILING DATE of this commun r Reply	ication appears on the	cover sheet with the c	orrespondence address		
WHIC - Exter after - If NO - Failu Any r	CRTENED STATUTORY PERIOD F HEVER IS LONGER, FROM THE Markets is a soft time may be available under the provisions SIX (6) MONTHS from the mailing date of this come period for reply is specified above, the maximum set or reply within the set or extended period for reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF TH s of 37 CFR 1.136(a). In no evenunication. tatutory period will apply and w y will, by statute, cause the app	IIS COMMUNICATION  ant, however, may a reply be tir  II expire SIX (6) MONTHS from  lication to become ABANDONE	N. nely filed the mailing date of this communicati D (35 U.S.C. § 133).	·	
Status						
. 1) 🖾	Responsive to communication(s) file	ed on 09 September 2	2005.			
.—						
3)	Since this application is in condition	for allowance except	for formal matters, pr	osecution as to the merits	is	
	closed in accordance with the pract	ice under <i>Ex parte</i> Qu	ayle, 1935 C.D. 11, 4	53 O.G. 213.		
Dispositi	on of Claims					
4)🛛	Claim(s) 1-8 and 26 is/are pending	in the application.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) 🗌	Claim(s) is/are allowed.					
6)🛛	Claim(s) 1-8 and 26 is/are rejected.					
•	Claim(s) is/are objected to.		,			
8) 🗌	Claim(s) are subject to restri	ction and/or election i	equirement.			
Applicati	on Papers		·			
9)🖂	The specification is objected to by the	ne Examiner.				
10)⊠	The drawing(s) filed on 08 May 200	<u>1</u> is/are: a)☐ accepte	ed or b)🛛 objected to	by the Examiner.		
	Applicant may not request that any obje	ection to the drawing(s)	oe held in abeyance. Se	e 37 CFR 1.85(a).		
	Replacement drawing sheet(s) including	g the correction is requi	ed if the drawing(s) is ol	pjected to. See 37 CFR 1.121	1(d).	
11)	11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119						
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
	1. Certified copies of the priority			dan Na		
	2. Certified copies of the priority					
	3. Copies of the certified copies application from the Internati	•		eu in this National Stage		
* 0	application from the internation see the attached detailed Office acti		* **	ed ·		
`	the attached detailed emee detail		mod dopied flot i dodit	<b>.</b>		
Attachmen	t(s)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
3) 🔲 Infor	e of Draftsperson's Patent Drawing Review ( mation Disclosure Statement(s) (PTO-1449 o r No(s)/Mail Date		Paper No(s)/Mail 0 5) Notice of Informal 6) Other:	Pate Patent Application (PTO-152)		

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Claims 9-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 9 September 2005.

### Drawings

- 2. Figure 1A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 175. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if

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only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

4. The disclosure is objected to because of the following informality:

Page 7 recites "word from the he opposing". The word "he" appears to be a typo. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Appropriate correction is required.

## Claim Objections

5. There are two claims with identical numbers in the application. 37 CFR 1.126 requires the original numbering of the claims to be preserved throughout the prosecution, therefor, misnumbered claim 3(b) has been renumbered 26.

# Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "each ... overtime" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "a set of random digital values" in lines 1-2. It is unclear if this refers to the same values recited in claim 2.

Claim 3 recites the limitation "said column strong driver signal" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "said row strong driver signal" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "said register file" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "said register file" in line 1. There is insufficient antecedent basis for this limitation in the claim.

The term "significant" in claim 4 is a relative term which renders the claim indefinite. The term "significant" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding claim 4, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

Claim 6 recites the limitation "said column strong driver" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "wherein said programmable column word constructor and said programmable column word constructor" in lines 1-3. Both elements are identical. There seems to be a typo in this claim, and it is unclear what is intended.

#### Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by applicant's admitted prior art.

Claim 1 describes the keyboard that applicant describes as background.

Applicant's proposed improvement to the known keyboard seems to be claimed in claim

2.

10. Claim 1-7 and 26, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Frielink, USPN 4,926,173.

With regard to claim 1, Frielink discloses a keypad security circuit (column 1 lines 6-12) including a comparator adapted to perform a bit wise comparison of a driver signal and a resulting signal (column 4 lines 13-37), a column output driver coupled to the comparator adapted to drive a keypad strong signal on a column, a row output driver

coupled to the comparator adapted to drive a keypad strong driver signal on a row (column 2 lines 54-68), a programmable column word constructor coupled to the row output driver adapted to provide a weak driver signal on a column (column 4 lines 38-49), and a programmable row word constructor coupled to the column output driver adapted to provide a weak driver signal on the row (column 4 lines 24-37).

With regard to claim 2, Frielink discloses a keyboard (column 2 lines 53-68) where a set of digital values varies (column 1 lines 36-41).

With regard to claim 3, Frielink discloses the random values are sent to the rows and columns (column 1 lines 36-66) from a register file (output lines, column 3 lines 29-30).

With regard to claim 4, Frielink discloses the random number generator generates patterns depending on the time, and thus changes over time (column 3 lines 25-28).

With regard to claim 5, Frielink discloses weak driver signals are changed on each row and column (column 4 lines 13-49).

With regard to claims 6, 7, and 26, Frielink discloses the bits comprising a 10, 01, or 11 (column 4 lines 35-38)

# Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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12. Claim 8, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Frielink in view of Valdenaire, USPN 5,677,687.

With regard to claim 8, Frielink discloses the limitations of claim 2, as outlined above. Frielink discloses a pull up (column 5 lines 35-40), but does not specifically disclose having a pull-down. Valdenaire discloses that keyboards often have pull-up and pull-down resistors (Figure 1, column 2 lines 45-46). It would have been obvious for one of ordinary skill in the art to use the output-randomizing keyboard of Frielink on the pull-up/pull-down keyboard of Valdenaire to increase security and prevent eavesdropping (Frielink, column 2 lines 2-5).

#### Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 571-272-3837. The examiner can normally be reached on M-Th 7 AM-3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571-272-3838. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL

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# Notice of References Cited Application/Control No. O9/851,757 Examiner Jacob Lipman Applicant(s)/Patent Under Reexamination SETHIA ET AL. Page 1 of 1

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-4,926,173	05-1990	Frielink, Franciscus J.	341/22
	В	US-5,677,687	10-1997	Valdenaire, Patrick	341/26
	С	US-4,333,090	06-1982	Hirsch, Steven B.	380/52
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#### FOREIGN PATENT DOCUMENTS

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#### NON-PATENT DOCUMENTS

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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.